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		· 06	100	110	120	130	140	

FIG.1B

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TNFR profile
FRI-1	116 н
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F16.1C

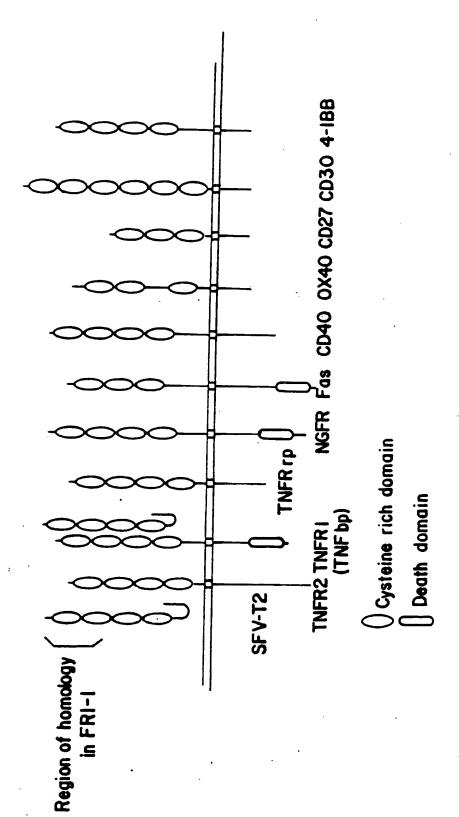


FIG.2A

AUG

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FIG.2B

10 30 50 ATCAAAGGCAGGCATACTTCCTGTTGCCCAGACCTTATATAAAACGTCATGTTCGCCTG 90 110 GGCAGCAGAGAAGCACCTAGCACTGGCCCAGCGGCTGCCGCCTGAGGTTTCCAGAGGACC 130 150 170 ACAATGAACAAGTGGCTGTGCTGCACTCCTGGTGTTCTTGGACATCATTGAATGGACA MNKW VFL 210 230 ACCCAGGAAACCTTTCCTCCAAAATACTTGCATTATGACCCAGAAACCGGACGTCAGCTC <u>O</u>ETPPPKYLHYDPE TGRQL 250 270 290 TTGTGTGACAAATGTGCTCCTGGCACCTACCTAAAACAGCACTGCACAGTCAGGAGGAAG L C D K C A P G T Y L K Q H C T V R R K 310 330 350 LCVPCPDYSYTDSWHTSDE 370 390 410 TGCGTGTACTGCAGCCCCGTGTGCAAGGAACTGCAGACCGTGAAACAGGAGTGCAACCGC YCSPVCKELQTVKQECMR 430 450 470 ACCCACAACCGAGTGTGCGAATGTGAGGAAGGGCGCTACCTGGAGCTCGAATTCTGCTTG HNRVCECEEGRYLELEFCL 510 530 AAGCACCGGAGCTGTCCCCCAGGCTTGGGTGTGCTGCAGGCTGGGACCCCAGAGCGAAAC HRSCPPGLGVLQAGTPERN 550 570 590 ACGGTTTGCAAAAGATGTCCGGATGGGTTCTTCTCAGGTGAGACGTCATCGAAAGCACCC V C K R C P D G F F S G E T S S 610 630 650 TGTAGGAAACACACCAACTGCAGCTCACTTGGCCTCCTGCTAATTCAGAAAGGAAATGCA C. R K H THCSSLGLLIQK 670 690 710 ACACATGACAATGTATGTTCCGGAAACAGAGAAGCAACTCAAAATTGTGGAATAGATGTC H D N V C S G N R E A T Q N C G 730 750 770 ACCCTGTGCGAAGAGGCATTCTTCAGGTTTGCTGTGCCTACCAAGATTATACCGAATTGG CEEAFFRFAVPTKIIPNW 810 830 CTGAGTGTTCTGGTGGACAGTTTGCCTGGGACCAAAGTGAATGCAGAGAGTGTAGAGAGG S V L V D S L P G T K V N A E S V E R 850 870 890 ATAAAACGGAGACACAGCTCGCAAGAGCAAACTTTCCAGCTACTTAAGCTGTGGAAGCAT K R R H S S Q E Q T F Q L L K L W K H 930 910 950 CAAAACAGAGACCAGGAAATGGTGAAGAAGATCATCCAAGACATTGACCTCTGTGAAAGC Q N R D Q E M V K K I I Q D I D L C 970 990 1010 AGTGTGCAACGGCATATCGGCCACGCGAACCTCACCACAGAGCAGCTCCGCATCTTGATG SVQRHIGHAMLTTEQLRILM

FIG.2C

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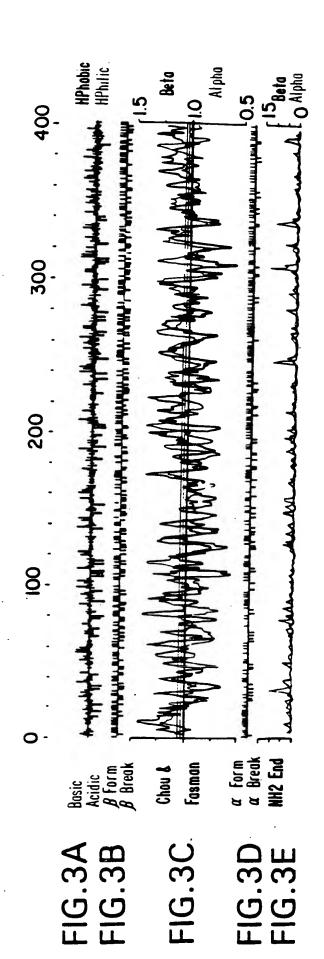
FIG.2D

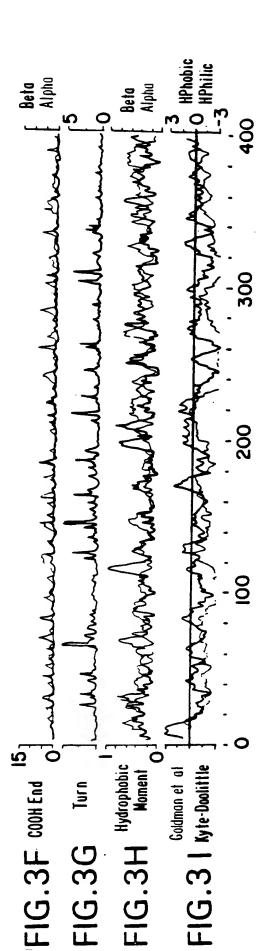
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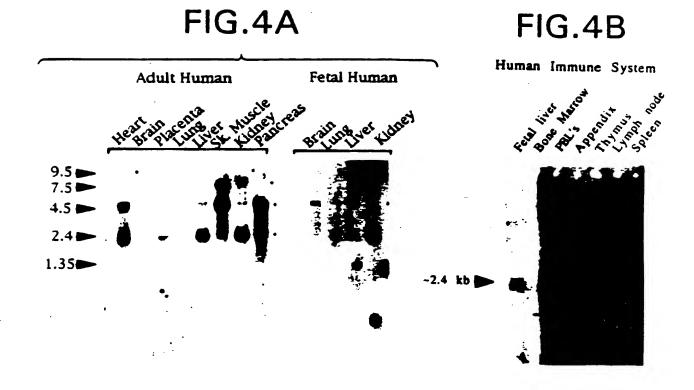
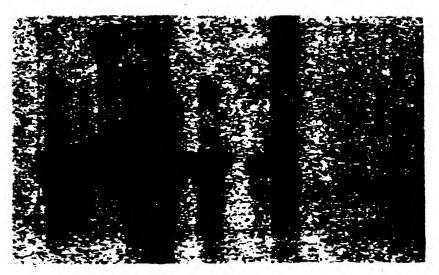


FIG.5



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FIG.6A

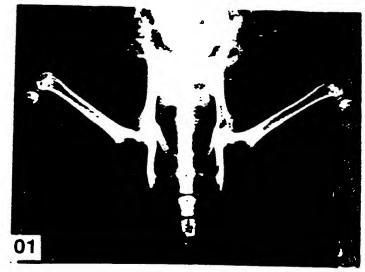


FIG.6B

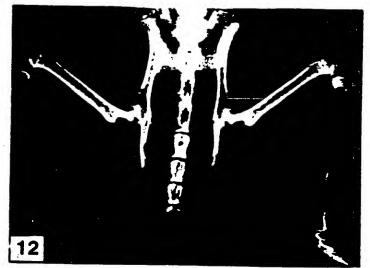


FIG.6C

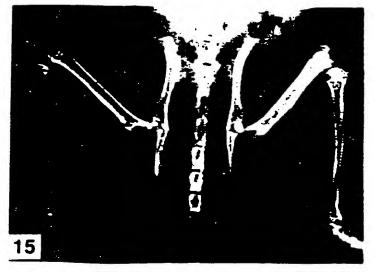


FIG.6D

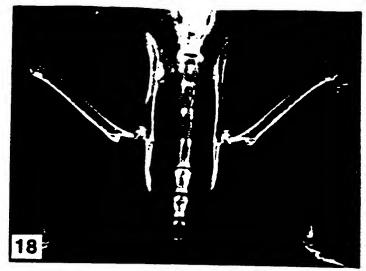


FIG.6E

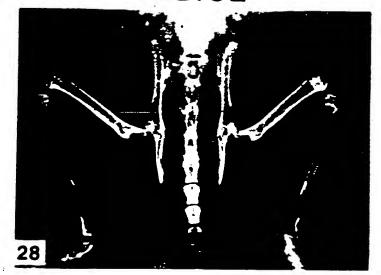


FIG.6F

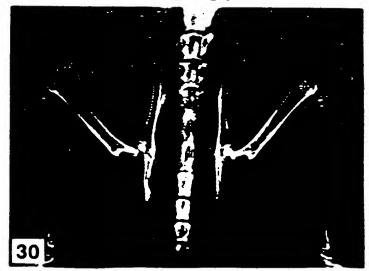


FIG.6G



FIG.6H

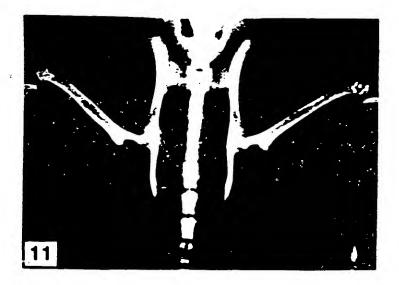


FIG.61



FIG.6J



FIG.7A

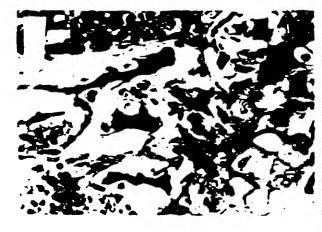
FIG.7B





FIG.7C

FIG.7D



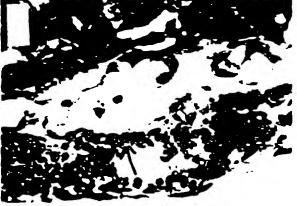


FIG.7E

FIG.7F

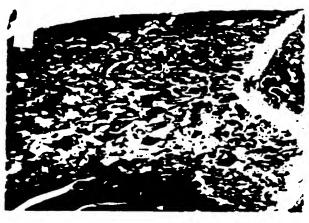




FIG.7G

FIG.7H

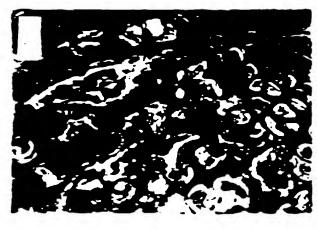
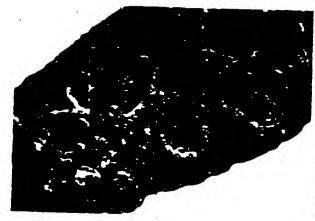




FIG.8A

FIG.8B



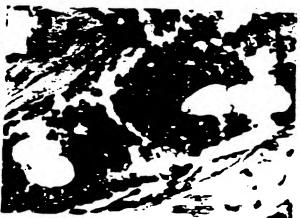


FIG.8C

FIG.8D





FIG.9A

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Y A	D	P	AUA	AAC	IGG	TCA	TCA	GCT	CCL	GTG	TGA	CAN	ATG	TGC	TCC	TCG	CAC	CTA	ССТА
I	ט	F	E	T	G	Н	Q	L	L	C	D	K	C	Α	P	G	T	Y	L
			50						27	0						290	_	•	
AA	ACA(GCA(CTG	CAC	AGT	GAG	GAG	GAA	GAC.	ATT	TTT	TGT	CCC	TTG	CCC	TGA	CCA	CTC	TTAT
K	Q.	п	C	${f T}$	V	R	R	K	T	L	C	V	P	С	P	D	Н	S	Y
			10						33	0						350			-
AC	GGA(CAG	CTG	GCA	CAC	CAG	TGA	TGA	GTG	IGT	GTA	TTG	CAG	CCC	AGT	GTG	CAA	GGA.	ACTG
T	D	3	W	H	T	S	D	E	С	V	Y	C	S	P	v	C	ĸ	E	L
		31	70						39	ס	_	•		•	•	410	••	_	_
CA	GTC	CGTC	GAA	GCA	GGA	GTG	CAA	CCG	CAC	CCA	CAA	റ്റദ	AGT	CTYC	TY: A	GTC'	TY: A	GGA.	AGGG
Q	S	V	K	Q	E	C	N	R	T	Н	N	R	v	Ĉ	E	C	E	E	G
_		43	30	-	_			••	450		••	**	•	_	E	470	£	Ε,	G
CG	TTAC		_	САТ	CGA	متسر	CTYC	سب				C 3.C.				9/0	-m-	~~~	CGTG
R	Y	L	E	I	E	F	CIG	L	שאוני										
	•	_	_	-	E	F	C	ם	K	Н	R	S	С	P	P	G	S	G	V
~~		49							510							530			
GIT	CA <i>A</i>	AGC'I	rGG						CAC	AGT	TTG	CAA	AAA	ATG	TCC	'AGA'	rgg	GTT	CTTC
V	Q	A	G	T	P	E	R	N	${f T}$	V	C	K	K	C	P	D	G	F	F
	•	55	50						570)						590			
TC	AGGT	IGAC	BAC	PTC.	ATC	GAA	AGC.	ACC	CTG	ГАТ	AAA	ACA	CAC	GAA	CTG	CAG	CAC	ATT	TGGC
S	G	E	T	S	S	K	Α	P	С	I	K	Н	T	N	c	S	T	F	G
		61	10						630	o	••	- •	•		_	650	-	•	•
CTO	CTC	CTA	LAT	rca(GAA.	AGG.	AAA'	TGC.	AAC	CA	TGA	CAA	CGTY	CTC	TTC	CGG	AAA	CAG	AGAA
L	L	L	I	Q	K	G	N	A	Т	Н	D	N	v	Ĉ	ŝ	G.	N	R	E
		67	7 <u>0</u>	-	••			••	690		_	• •	•	•	•	710		.,	_
GCC	CACC	-	_	יבאדב	TCC.	λλΤ	ימיטמ	TCT4			CTC	TY: A	202			/ I U	- 20		TCCT
A .	T	0	K	C	G	Ī	D	v	T	L	C	E	E	A	F	P	שתי	211	A
• •	•	73		•	3	-	ט	٧	750	_	C	£	E	A	F	-	R	F	A
املات	ויייים	-	-	7 A 77	TI A CT	100								~~-		770			~ ~ ~ ~
V.	rcci P	T							_								iCC	166	GACC
•	-	T.	K	Ι	I	P	N	W	L	S	V	L	V	D	S	L	₽	G	T

FIG.9B

			90						81	0						830			
AA	AGT	GAA	TGC	CGA	GAC	TGI	AGA	GAC	GAT	AAA	ACG	GAG	ACA	CAG	CTC	303	A C A	CCX	AACC
K	V	N	Α	E	S	V	E	R	T	ĸ	R	D	תטת ט	S					
		8	50			•	_		87	n``	••	**	п	3	_	Q	E	Q	T
TT	CCA	GCT	GCI	GAA	GCT	GTG	GAA	AC	TCA	ΔΔΔ	CAG	ac a	CCX	CC 2	3 3 m	890	~	٠.,	GATC
F	0	L	L	K	L	W	K	Н	Q	N	סתטו	D	CCA A						
	_	_9	10	••	_	••	••	• • •	93		Т	U	Q	E	M	V	K	K	I
АТ	CCA			א בעדי	ССТ	~~	יתיי א	3.30	C E		~~.	~~~				950			
Ī	0	D	I	TOL	CC I	CIG	TOW	MAC	CAG	CGI	GCA	الفاتان	GCA	TCT	CGG	CCA	CTC	GAA	CCTC
•	¥	_	70	ט	L	С	E	S			Q	R	Н	L	G	Н	S	N	L
20			_	~~~					99	0					1	010			
AC.	CACA	AGA	JCA	GC.T.	TCT	TGC	CTT	GAI	GGA	GAG	CCT	CCC	TGG	GAA	GAA	GAT	CAG	CCC	AGAA
T	T	E	Q	L	L	Α	L	M			L	P	G	K	K	I	S	P	E
		10							105	0					1	070			
GA	GAT.	rga(GAG	AAC	GAG	AAA	GAC	CTG	CAA	ATC	GAG	CGA	GCA	GCT	CCT	GAA	GCT	'ACT	CAGT
E	I	E	R	T	R	K	${f T}$	C	K	S	S	E	Q		L	K		L	
		109							111	0			_		1	130	_	_	•
TT.	ATGO	GNG (GAT	CAA	λλλ	TGG	TGA	CCY	AGA	CVC	CTT	GΛλ	GGG	CCT	GAT	GTA'	TGC	CCT	CAAG
L	W	K	1	K	N	G	D	Q	D	\mathbf{T}	L	K	G	L	М	Y			К
		115							117	0					1	190		_	**
CA	CTTC	GAA	W C	ATC	CCV	CTT	TCC	CAA	VYC.	TGT	CVC	CCA	CAG'	TCT	GAG	GAA	GΛC	СЛТ	GAGG
Н	L	K	Т	S	Н	F	P	K	T	V	T	Н	S	L	R	K	T	M	R
		123							123						1	250			
TT	CCTC	CAC	CAG	CTT	CAC	AAT	GTA	CAG	ACT	GTA	TCA	GAA	GCT	CTT	TTT.	AGA.	AAT	GAT	AGGG
F	L	Н	S	F	T	M	Y	R			Q				L	E	M	I	G
		127			•				129	0					1	310			
AA'	rcac	GT.	ICA	ATC	CGT	GAA	AAT	AAG	CTG	CTT	ATA	ACT	AGG.	AAT	GGT	CAC	TGG	GCT	GTTT
N	Q	V	Q	S	V	K	I	S	С	L									
				•															
CT'	TCA																		

FIG.9C

GT!	TAT	rat.	10 AAC	נביתב	ልጥ <u>ና</u> ያ	ACC(TOTA A		30)						50			
			70	3 1 02	1102	100	3.T.W(افافا	30 GTGC 90	:GG2	AGA(CGC	ACCC	GAC	GCG	CTCC	CCC	AGC	CCGC
CGY	CTC	CA	AGC	CCT	rgac	GT	יייר	ree	GGAC	, , , ,	7 3 3 5	~			1	110			
								-	JUNC	CAC	M	LGAZ NI	····K	(G'I")	rger	CIC	CIG	CGC	CGCT
		1.	30						150)							<u> </u>	_A_	L
CGT	GIT	TC	rgg/	CAI	CTC	CAT	MAT	AGTY	GGAC	CAC	CCA	\GG <i>I</i>	\AAC	:Gm	י ייירר	יייירר		CIT'S	CCI
<u>V</u>	F_			_I	S	I	<u>_K</u>	W			0	_E	T	F	P	P	K	Y	T.
ጥ ር እ	TOTAL N	T 2	90						210						~ 2			-	_
H	Y	D	ACGA E	LAGA E	LAAC	CTC	TC	MC	AGCT	GI 1	GTC	TG	CAA	ATC	TCC	CTCC	TGG	TAC	CTA
••	•	25		E,	T	S	H	Q	<u> </u>	L	C	D	K	C	P	P	G	T	Y
CCT	ΆΛΑ	ACA	ACA	CTG	TAC	AGC		CTY	270 GAA			~~~			2	90			
L	K	Q	Н	c	T	A	K	W.	K K	GAC T	.CG1 V	GIG	CGC	CCC					
		31			_	•		•••	330	_	•	C	A	P	C	P	D	Н	Y
CTA	CAC	AGA	CAG	CTG	GCA	CAC	CAG	TG	ACGA	GTG	יייי	מידמי	CTC	CAC		50	~~		
Y	${f T}$	D	S	W	Н	T	S	D	E	Ċ	L	Y	C	S	P	.CGT		CAA K	
		37						_	390	_	_	_	•	_	· · ·	10	C		E
GCT	GCA	GTA	CGT	CAA	GCA	GGA	GTG	CA	YTĆĞ	CAC	CCA	CAA	CCG	CGT	YETY:	CCA	АТС	C 2 2	CCA
L	Q	1	V	K	Q	E	C	N	R	T	Н	N	R	v	C	E	~	K	E
		43						_	450				•	•		70	•		_
AGG	GCG	CTA	CCT	TGA	GAT.	AGA	GTT	CTC	CTT	GAA	ACA	TAG	GAG	CTG	CCC	TCC	TGG	АТТ	TGG
G	R	I		E	I	E	F	C	Ļ	K	Н	R	S	C	P	P	G	F	G
N COV	~~~	49							510						5	30	_	_	
V	V V	GCA	AGC	TGG.	AAC	CCC	AGA	GCG	AAA	TAC	AGT	TTG	CAA	AAG	ATG	TCC	AGA	TGG	GTT
٧	V	Q 55	^	G	T	P	E	R	N	T	V	C	K	R	C	P	D	G	F
Стт	ישר			CAC		a mo	7733	100	570						5	90			
F	S	N	E	T	S	S	K		ACC	-TG				CAC					
•	•	61	_		3	3	v	A	P 630	С	R	K	Н	T	N	C	S	V	F
TGG	rcre			A A C'	Τ⁄ Δ	288	NGC		TGC		202	co.	~ > >	~~~	6	50			
G	L	L	L	T	0	K	nGG.	aaa N	A	T.	ACA H	CGA D	CAA N				CGG		
_		67	_	. •	4	1	G	Δ	690	T	п	U	M	I	C	S 10	G	N	S
TGA	ATC			AAA	ATG	rgg.	ААТ	AGA	TGT	_{የል} ር	ССТ	GTY2	ተን አ	CCA		Y LLALL	C C C C C C C C C C C C C C C C C C C	C 1 C	COO
E	S	T	Q	K	C	G	I	D	v	T	L	C	E	E	A	P	P	R	F
		73	0 _		_	_	_	_	750	-	_	~	_			70	F	~	F
TGC1	GT	rcc'	TAC	AAA (3TT	PAC	GCC'	TAA	CTGG	CT	TAG'	TGT	CTT	GT.			الململ	GCC	TGG
A	V	P	T	K	F	T	P	N	W	L	S	v	L	v	D	N	L	P	G

FIG.9D

		79							810						9	330			
CAC	CAA	LAGI	'AAA	\CGC	'AGA	GAG	TGT	AGA	GAG	GAT	CAAA7	ACC	CCA	303	O N O				
T	K	V	N	A	E	S	v	E	R	I	ייייי	R							_
		85	0		_	_	•	-	870	_	~	K	Q	Н	ຣຼ	S	Q	E	Q
GAC	TrTT	CCA	ĞСТ	Y:CT	YZA A	CTT	A TV:	C 3 3	303	ma :	LAAA	۰.,			8	190			
T	F	0	L	L	שלט	L	WIG.	UMA.	MCA	16	VAAA	CAA			AGA	TAT	'AGT	CAA	GAA
•	•	91	_	ם	K	ע	W	K	Н	Q	N	K	D	Q	D	I	V	K	K
CAT	~ > ~								930						9	50			
GWI	CAI	CCA	AGA	TAT	'IGA	CCT	CIG	TGA	AAA	CAG	CGT	GCA	GCG	GCA	CAT	TGG	ACA	TGC	TAA
I	I	Q	U	I	D	L	C	E	N	S	V	Q	R	Н	I	G	Н	A	N
		97							990			_			10	10	•••		_
CCT	CAC	CTT	CGA	GCA	GCT	TCG	TAG	CTT	GAT	GGA	LAA G	CTT	ACC	GGG	ΔΔΔ	GAA	ACT	ccc	ACC
L ·	${f T}$	F	E	Q	L	R	S	L	M	E	S	t.	P	G	K	K	v	G	A
		103	0	-					050	_	_	_	•	•		70	٧	G	A
AGA	AGA	CAT	TGA	AAA	AAC	AAT	AAA	GGC	ATG	CAA	ACC	CAC	TV A	CC 2	7 T U	70 20	~	~~m	~~~
E	D	I	E	К	T	I	K	A	C	- Tr	P	CAG	IGN			CCI			
	_	109	_	••	•	•	11		110	v	P	3	D	Q	I		K	L	L
CAG				ል ልጥ			mcc		110		-				11	30			
S	L	W	R	I	กกก ช	MAA	100	CGA	CCA	AGA	CAC	CTT			CCT			CGC.	ACT
•	_	115		7	K	N	G	D	Q	D	T	L	K	G	L	M	Н	A	L
A A A				~~		~~		 T	170						11	90			
K	H	S	~~~	CAC	GTA	CCA	CTT	LCC	CAA	AAC	TGT				TCT	'AAA'	GAA	GAC	CAT
. .		3 121	K	T	¥	Н	F.			T	V	T	Q	S	L	K	K	${f T}$	I
C 3 C			_					_ 1	230						12	50			
CAG	- T.T.	CC.I.	ICA	CAG	CTT	CAC.	AAT	GTA	CAA	ATT	'GTA'	TCA	GAA	GTT	ATT	TTT	'AGA	AAT	GAT
R	F	L	H	S	F	T	M	Y	K	L	Y	Q	K	L	F	L	E	M	I
		127	-					1	290						13	10			
AGG	raa(CCA	GGT	CCA	ATC.	AGT.	AAA	AAT	AAG	CTG	CTT	ATA	ACT	GGA	AAT	GGC	САТ	TGA	GCT
G	N	Q	V	Q	S	٧	K	I	S		L						~		
		1330)	_				_1	350	_	_								
GTT	rcc	ICA	CAÁ'	TTG	GCG.	λGA	rcc		GGA?	IY; A	ТДД								
										1									

FIG.9E

50 50	100 100 100
muosteo.frg M N K W L C C A L L V L L D I I E W T T Q E T L P R Y L H Y D P E T G H Q L L C D K C A P G T Y L ratosteo.frg M N K W L C C A L L V F L D I I E W T T Q E T F P R Y L H Y D P E T G N Q L L C D K C A P G T Y L huosteo.frg M N K L L C C A L V F L D I S I K W T T Q E T F P P K Y L H Y D E E T S H Q L L C D K C P P G T Y L	nuosteo.frg KQHCTVRRKTLCVPCPDHSYTDSWHTSDECVYCSPVCKELQSVKQECNRT ratosteo.frg KQHCTVRRKTLCVPCPDYSYTDSWHTSDECVYCSPVCKELQTVKQECNRT huosteo.frg KQHCTARWKTVCAPCPDHYYTDSWHTSDECLYCSPVCKELQYVKQECNRT

muste .frg HNRVCECEEGRYLEIEFCLKHRSCPPGSGVVQAGTPERNTVCKKCPDGFF rat stee.frg HNRVCECEEGRYLELEFCLKHRSCPPGLGVLQAGTPERNTVCKRCPDGFF huostee.frg HNRVCECKEGRYLEIEFCLKHRSCPPGFGVVQAGTPERNTVCKRCPDGFF
au stee.frg HNRVCECEEGR at stee.frg HNRVCECEEGR auostee.frg HNRVCECKEGR
au ste .frg HNRVCEC at steo.frg HNRVCEC auosteo.frg HNRVCEC
at stee frg H at stee frg H atostee frg H

FIG.9F

250	300
250	300
250	300
muosteo.frg LCEEAFFRFAVPTKIIPNWLSVLVDSLPGTKVNAESVERIKRHSSQEQTratosteo.frg LCEEAFFRFAVPTKIIPNWLSVLVDSLPGTKVNAESVERIKRHSSQEQT huosteo.frg LCEEAFFRFAVPTKFTPNWLSVLVDWLPGTKVNAESVERIKRQHSSQEQT	muosteo.frg FQLLKLWKHQNRDQEMVKKIIQDIDLCESSVQRHLGHSNLTTEQLLALME rat steo.frg FQLLKLWKHQNRDQEMVKKIIQDIDLCESSVQRHIGHANLTTEQLRILME huosteo.frg FQLLKLWKHQNRDQDIVKKIIQDIDLCENSVQRHIGHANLTFEQLRSLME

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steo	Stac		ישרפי
DUE!	rato		777

muosteo.frg H L K TSHFPKTVTHSLRKTMRFLHSFTMYRLYQKLFLEMIGNQVQSVKISC ratosteo.frg H L KAYHFPKTVTHSLRKTIRFLHSFTMYRLYQKLFLEMIGNQVQSVKISC hu steo.frg HSKTYHFPKTVTQSLKKTIRFLHSFTMYKLYQKLFLEMIGNOVQSVKISC

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One	ato	buo
_	H	

FIG. 10

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H L R H C L S C S - K C R K E M G Q V E I S S C T V D R D T V C G C R K N Q Y R H Y W S E N L F T S D E C L Y C S P V C - K E L Q Y V K - Q E C N R T H N R V C E C K E G R Y L E I E - F	CS-KCRKEMGOVEISSCTVDRDTVCGCRKNOYICSPVC-KELQYVK-QECNRTHNRVCECKEGRYI	98
CLSCS-KCRKENGOV	ENHLRHCLSCS - KCRKENGOVWHTSDECLYCSPVC-KELQYV	Y & S E N L F
CLSCS-KCRKENGOV	ENHLRHCLSCS - KCRKENGOVWHTSDECLYCSPVC-KELQYV	TVDR
CLSCS-KCRKENGOV	ENHLRHCLSCS - KCRKENGOVWHTSDECLYCSPVC-KELQYV	E I S S C K - 0 E C
- S O S T O	ENHLRHCLSCS-WHTSDECLYCSP	2 C
T S D E C L Y C S F	ENHLRHCLSCS EWHTSDECLYCSP	V C C R
T S D E C	F ENHLRHC E WHTSDEC	S 2 X 7 7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	2 X 13 3	T S D E C

ItARY OCFNCSLCLNG-TVHLSCOEKONTVCT-CHAGFFLRE---NECVS

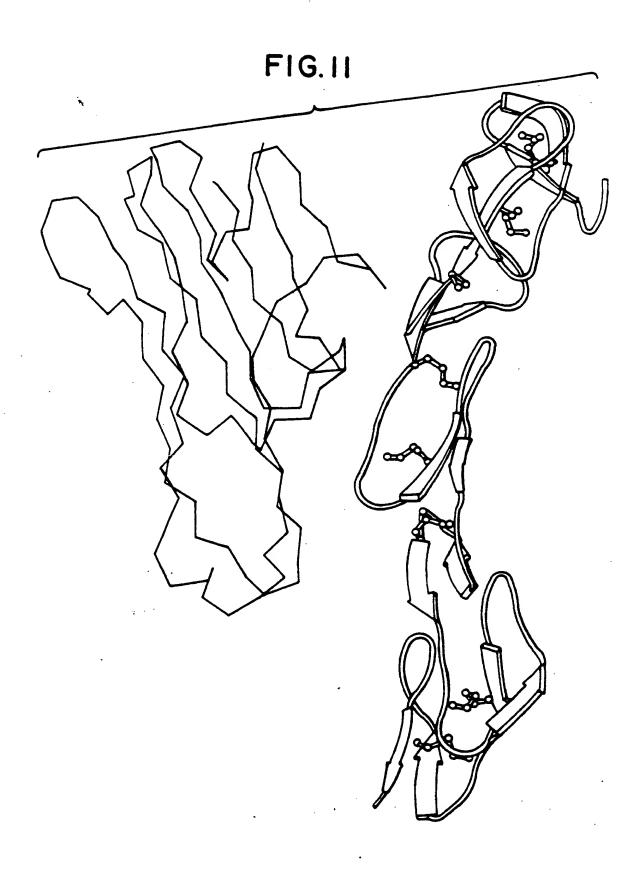


FIG. 12A

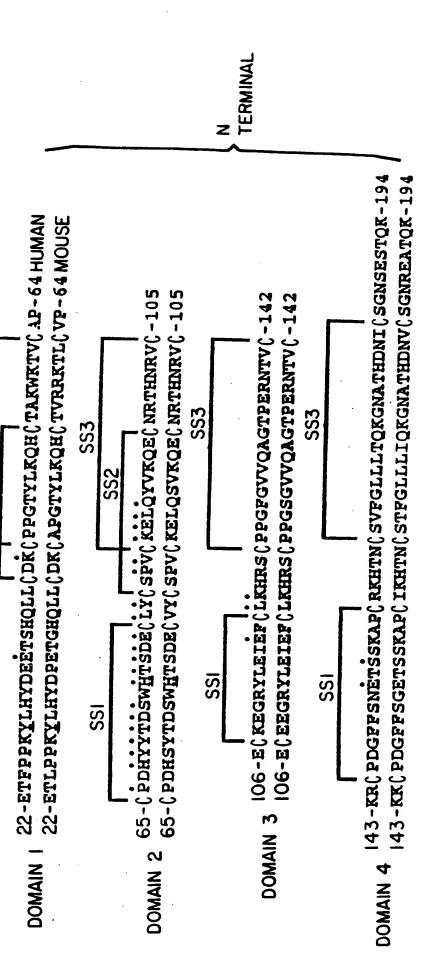


FIG. 12B

195-GGIDVTLCEEAPPRPAVPTKPTPNWLSVLVDNLPGTKVNAESVERIKRQHSS-246 195-csidvticerappravptkiipnwlsvlvdslpgtkvnaesverikrrhss-246

247-geqtfollklwkhonkdodivkkiiqdidiænsvorhighanltfeolrsl-298 247-QEQTFQLLKLWKHQNRDQEMVKKIIQDIDLÇESSVQRHLGHSNLTTEQLLAL-298

299-Mesipgkkvgaediektikackpsdqilklisiwrikngdqdtlkglmhalk-350 299-meslpgkkispebiertrktckseqllkllslwrikngdodtlkglwyalk-350

351-hsktyhppktvtoslkktirplhsptmyklyoklflemignovosvkisch-401 351-Hlktshppktvthslrktmrplhsptmyrlyqklflemignqvqsvkisch-401

TERMINAL

FIG.13A

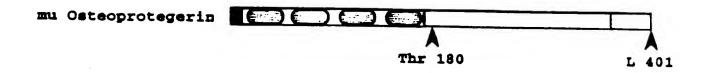


FIG.13B

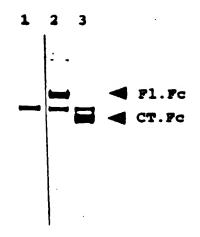
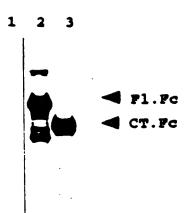
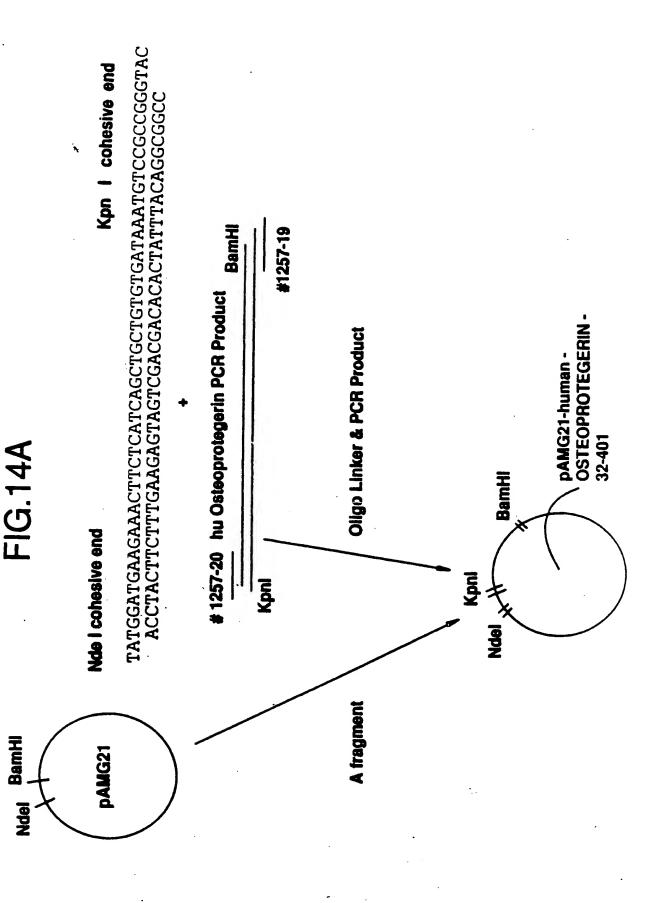


FIG.13C





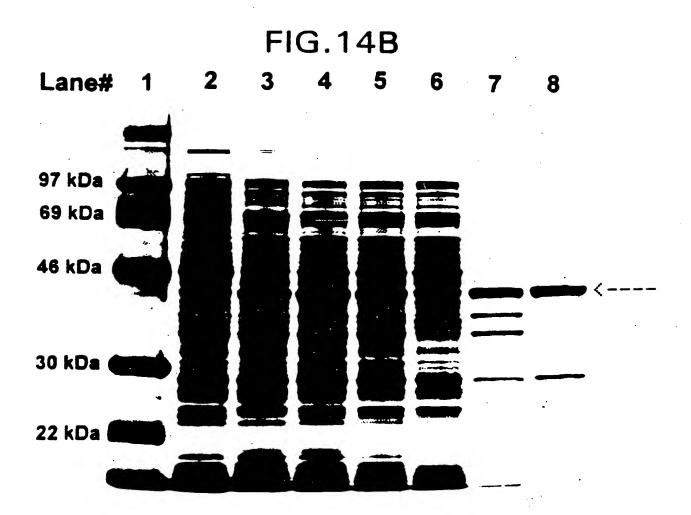


FIG.15

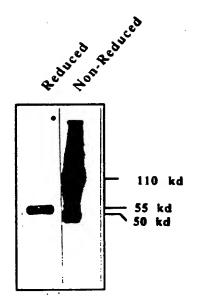
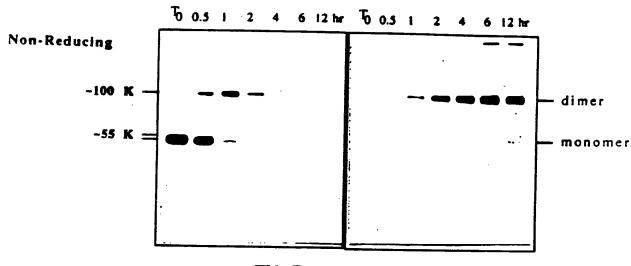


FIG.16A

Cell Lysate

Medium



. FIG. 16B

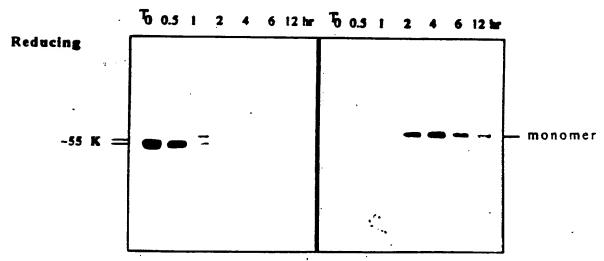


FIG.17

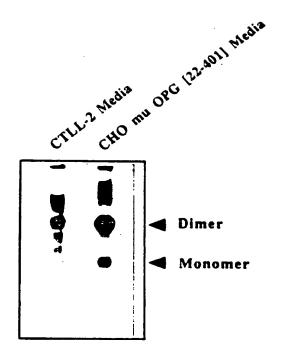
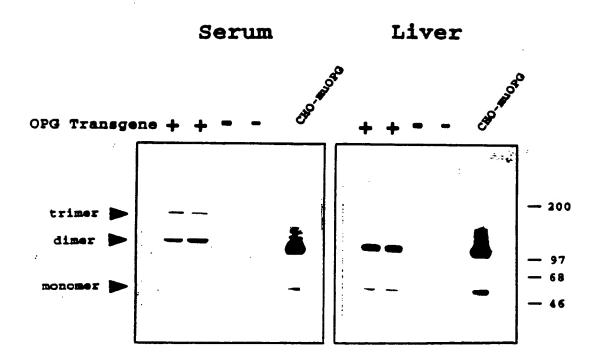
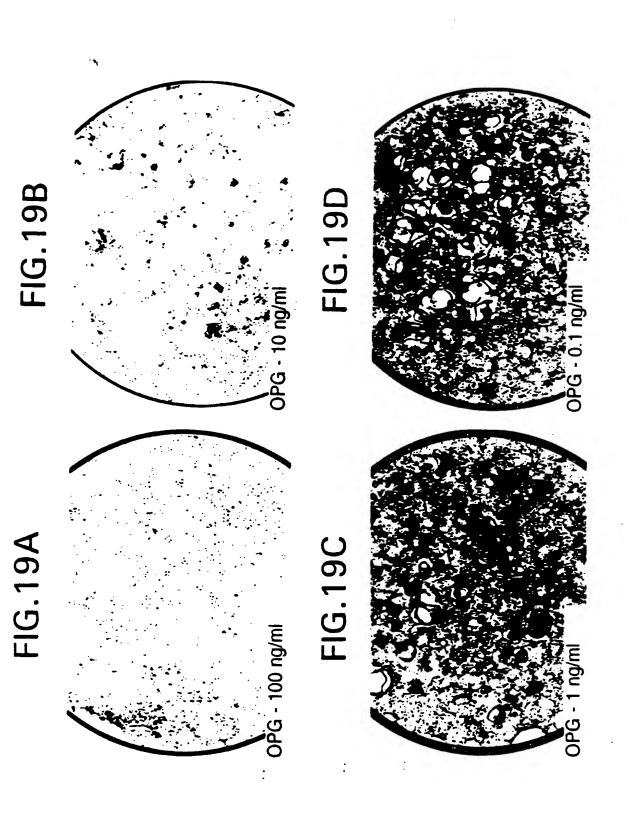
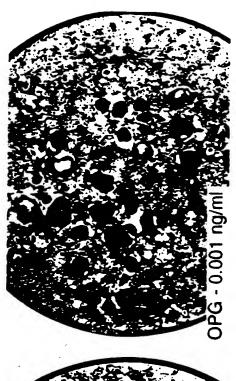


FIG.18







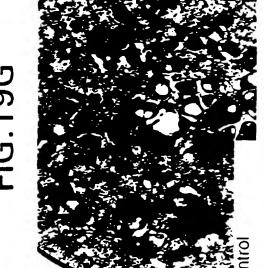
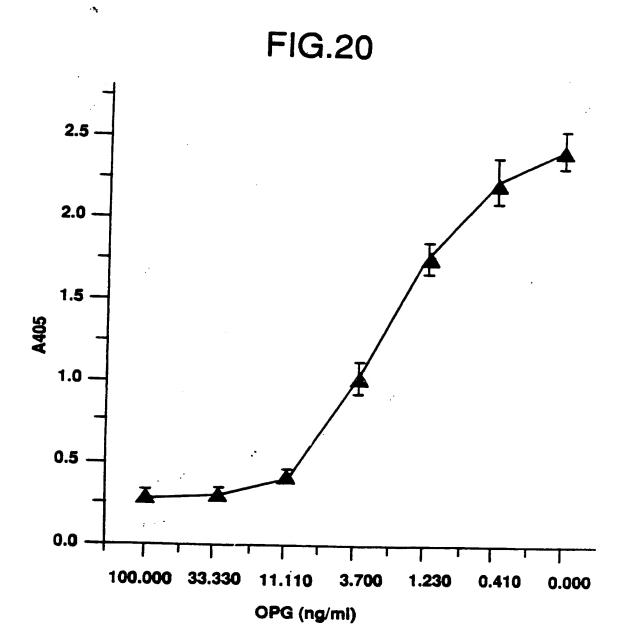


FIG.19G



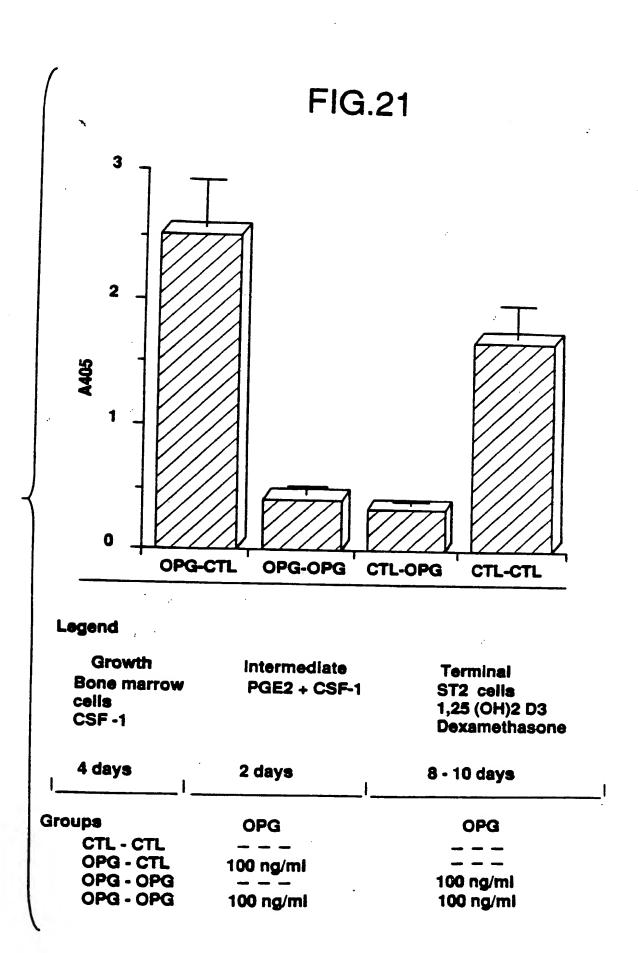


FIG.22A

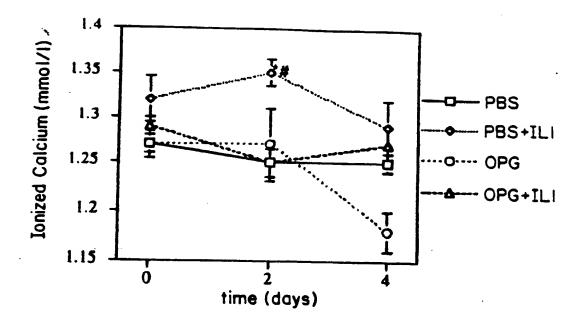
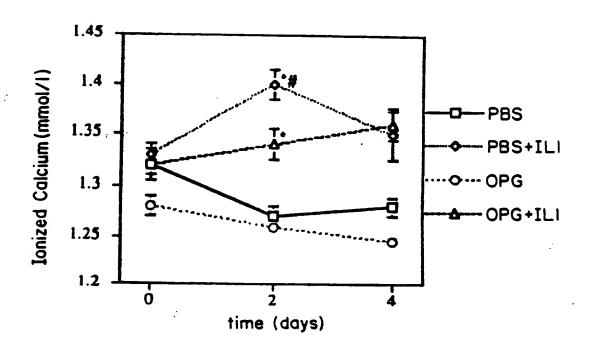


FIG.22B



^{*} Different to PBS, p < 0.05

Different to OPG + IL1, p < 0.05

FIG.23A

PBS/PBS

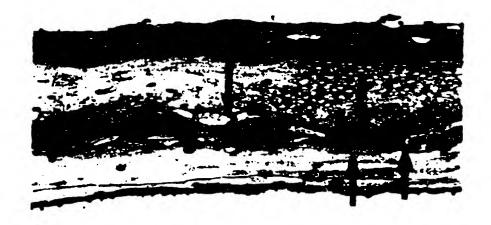


FIG.23B



FIG.23C

PBS/OPG

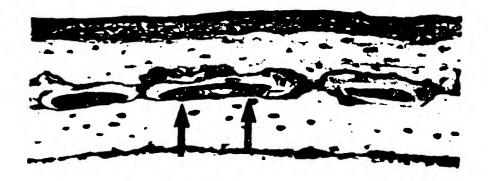


FIG.23D

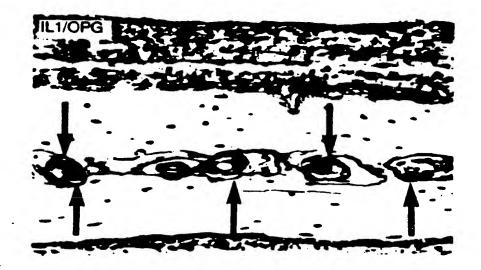


FIG.24A

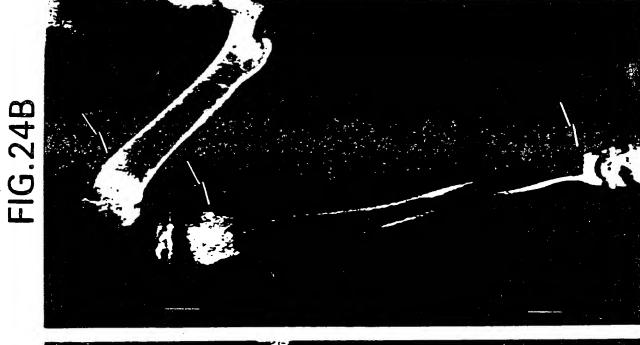
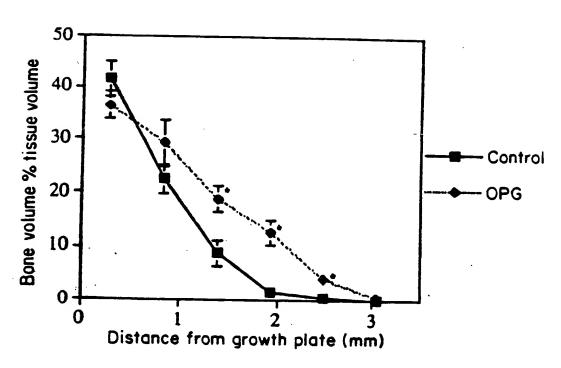




FIG.25



Different to control p < 0.01

FIG.26A

FIG.26.B





FIG.27

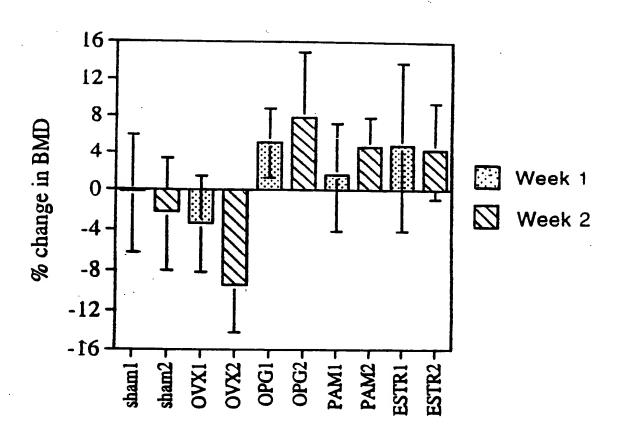
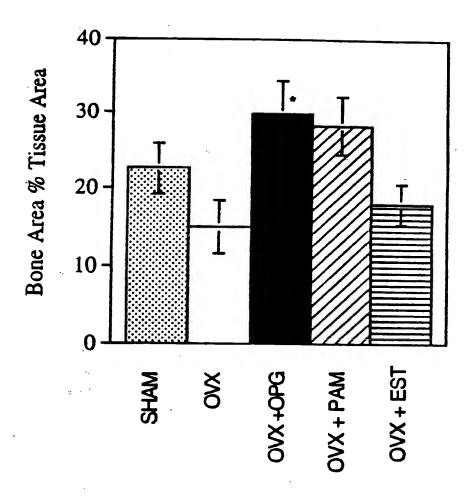


FIG.28



Different to OVX p < 0.05

Figure 29A

Draiii
CATGGGAAATGTCAGAGTGGAGAACCACACCGAGTGCCACTGCAGCACTTGTTATTATCA
GTACCCTTTACAGTCTCACCTCTTGGTGTGGCTCACGGTGACGTCGTGAACAATAATAGT
CANATCCTANTAGTTTGCAGTGGGCCTTGCTGATGATGGCTGACTTGCTCAAAAGGAAAA
GTTTAGGATTATCAAACGTCACCCGGAACGACTACTACCGACTGAACGAGTTTTCCTTTT
TTAATTTGTCCAGTGTCTATGGCTTTGTGAGATAAAACCCTCCTTTTCCTTGCCATACCA 121
TTTTTAACCTGCTTTGAGAATATACTGCAGCTTTATTGCTTTTCTCCTTATCCTACAATA
181 AAAAATTGGACGAAACTCTTATATGACGTCGAAATAACGAAAAGAGGAATAGGATGTTAT 240
TAATCAGTAGTCTTGATCTTTTCATTTCGAATGAAATATCCCATTTACCAGGACCAG
ATTAGTCATCAGAACTAGAAAAGTAAACCTTACTTTATACCGTAAATCGTACTGGTATTT
AAGCTGATTCCACTGGAAATAAAGTCTTTTTAAATCATCACTCTATCACTGAATTCTAATT
FICGACTAAGGIGACCTITATITCAGAAAATTTAGTAGTGAGATAGTGACTTAAGATTAA
TTTTCTGAAAAGTTTCAAGCCAGTTACTTTTGATAGGATTAACGGAAGGGAGTGAGCCAG 361 + 420
AAAAGACTTTTCAAAGTTCGGTCAATGAAAACTATCCTAATTGCCTTCCCTCACTCGGTC
XCTAL '
TGGGTGAGGTGCGATTCCCATGTAGTCAATGCCCTAATACTGGAGAATCTTATTCTAACCA
ACCCACTCCACCCAAGGGTACATCAGTTACCGGATTATGACCTCTTAGAATAAGATTGGT
AGCCTTCCAGAGCAAGCTGTGAGCCCCTCAGACAGTGGGCTACTCATGAGACAGTCCATT
TCGGAAGGTCTCGTTCGACACTCGGGGAGTCTGTCACCCGATGAGTACTCTGTCAGGTAA
GGGGTAAAGGAAGAAATATAACTTCTATTTCTATTTGATTGCACATTGTCTTTAGATGC 541
CCCCATTTCCTTCTTTTATATTGAAGATAAAGATAAACTAAACGTGTAACAGAAATCTACG
CCATTTGGGTGAGTTTTATAGAAGTACAGCTACATTAAAAAATAGAACTGATAATAGATA 601 + 660
GGTAAACCCACTCAAAATATCTTCATGTCGATGTAATTTTTTATCTTGACTATTATCTAT AGGCTTTAAAAAAACTTCATCACCAGTTTGTCAAGATTCCATTTCAAAGTGAAAA
661 + + + + + + + + + + + + + + + + + +
CCAATTTCTAACGGGTTGGTAAACACAGCAGATGGCAGGGTGAAAAATTAAAGTGAGTG
721
ATGTACCTTTAAAGAAACACTGAAATGCACACACATTACTTAACCTGCTCATTCAT
781 + 840 TACATGGAAATTTCTTTGTGACTTTACGTGTGTGTAATGAATTGGACGAGTAAGTA
TTACATATAGTCTTGGGTGTACAAAATTTAGAAATAAATA
841 + 900 AATGTATATCAGAACCCACATGTTTTAAATCTTTATTTAT
GCTGCACAAATAGGATGCGCGGGGCGTTGGTAGGGGCGGAGCCTTAGCTGCACAAATA 901 + 960
CGACGTGTTTATCCTACGCGCCGGGAACCATCCCCGCCTCGGAATCGACGTGTTTAT
GGATGCGCGGGGCCTTGGTGGGGGCGGGGCCTAAGCTGCGCAAGTGGTACACAGCTCA 961
CCTACGCGCCGGGAACCACCCCCGGCCCCGGATTCGACGCGTTCACCATGTGTCGAGT
GGGCTGCGATTTCGCGCCAAACTTGACGGCAATCCTAGCGTGAAGGCTGGTAGGATTTTA 1021 + 1080
CCCGACGCTAAAGCGCGCTTTGAACTGCCGTTAGGATCGCACTTCCGACCATCCTAAAAT

Figure 29B

TCCCCGCTGCCATCATGGTTCGACCATTGAACTGCATCGTCGCCGTGTCCCAAAATATGG	
AGGGGGACGGTAGTACCAAGCTGGTAACTTGACGTAGCAGCGGCACAGGGTTTTATACC	1140
GGATTGGCAAGAACGGAGACCTACCCTGGCCTCCGCTCAGGAACGAGTTCAAGTACTTCC	
CCTAACCGTTCTTGCCTCTGGATGGGACCGGAGGCGAGTCCTTGCTCAAGTTCATGAAGG	1200
AAAGAATGACCACAACCTCTTCAGTGGAAGGTAAACAGAATCTGGTGATTATGGGTAGGA	1260
TTTCTTACTGGTGTTGGAGAAGTCACCTTCCATTTGTCTTAGACCACTAATACCCATCCT	1200
AAACCTGGTTCTCCATTCCTGAGAAGAATCGACCTTTTAAAGGACAGAATTAATATGTTC	1320
TTTGGACCAAGAGGTAAGGACTCTTCTTAGCTGGAAATTTCCTGTCTTAATTATATCAAG	
Saci BstXI	
TCAGTAGAGAACTCAAAGAACCACCACGAGGAGCTCATTTTCTTGCCAAAAGTTTGGATG	1200
AGTCATCTCTTGAGTTTCTTGGTGGTGCTCCTCGAGTAAAAGAACGGTTTTCAAACCTAC	1380
AflII	
ATGCCTTAAGACTTATTGAACAACCGGAATTGGCAAGTAAAGTAGACATGGTTTGGATAG	
TACGGAATTCTGAATAACTTGTTGGCCTTAACCGTTCATTTCATCTGTACCAAACCTATC	1440
TCGGAGGCAGTTCTGTTTACCAGGAAGCCATGAATCAACCAGGCCACCTCAGACTCTTTG	•
AGCCTCCGTCAAGACAAATGGTCCTTCGGTACTTAGTTGGTCCGGTGGAGTCTGAGAAAC	1500
TGACAAGGATCATGCAGGAATTTGAAAGTGACACGTTTTTCCCAGAAATTGATTTGGGGA	
ACTGTTCCTAGTACGTCCTTAAACTTTCACTGTGCAAAAAGGGTCTTTAACTAAACCCCT	1560
AATATAAACTTCTCCCAGAATACCCAGGCGTCCTCTCTGAGGTCCAGGAGGAAAAAGGCA	
TTATATTTGAAGAGGGTCTTATGGGTCCGCAGGAGAGACTCCAGGTCCTCCTTTTTCCGT	1620
TCAAGTATAAGTTTGAAGTCTACGAGAAGAAGAAGATGCTTTCAAGTTCT	
AGTTCATATTCAAACTTCAGATGCTCTTCTTTCTGATTGTCCTTCTACGAAAGTTCAAGA	1680
BglII	
CTGCTCCCCTCCTAAAGCTATGCATTTTATAAGACCATGGGACTTTTGCTGGCTTTAGA	
GACGAGGGGATTTCGATACGTAAAAATATTCTGGTACCCTGAAAACGACCGAAATCT	L740
TCTGAAACACTGAAATTGTCTGCTTCTCATCTTCAGTGAGATTCCAAAGGATAGTACAGT	
AGACTTTGTGACTTTAACAGACGAAGAGTAGAAGTCACTCTAAGGTTTCCTATCATGTCA	1800
GACAGAACAAGAATAGGCACTCTCTACAAAAAAAAAGAAAG	260
CTGTCTTGTTCTTATCCGTGAGAGATGTTTTTTTTTTTT	1860
GCATAATAGCTACTGTTAAGAACTCAGAGATAATGAATTGAGAATGGATACTGCTTGAAA	
CGTATTATCGATGACAATTCTTGAGTCTCTATTACTTAACTCTTACCTATGACGAACTTT	,920
TGAAAATTTAATAAGTTAGAAACTAAACTTTATAAAAATAAAAAAAA	
921 + 1 ACTITIAAATTATTCAATCTTTGATTTGAAATATTTTTTATTTTTTTT	.980
. NheI	
ANNANANANANANANACCCCCCCCCCCCCCCCCCCCCCC	
981 TTTTTTTTTTTTTTTTGGGGGGGGGGGGGGGGGGGGG	040
BapLUllI	
AGGGGATAACGCAGGAAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAA	

Figure 29C

TCCCCTATTCCGTCCTTTCTTC		
	TACACTCGTTTTCCGGTCGTTTTCCGGTCCTTGGCATT	2100
AAAGGCCGCGTTGCTGGCGTTT	TTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAA	
TTTCCGGCGCAACGACCGCAAA	AAGGTATCCGAGGCGGGGGGGACTGCTCGTAGTGTTTTT	2160
TCGACGCTCAAGTCAGAGGTGG	CGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCC	
AGCTGCGAGTTCAGTCTCCACC	GCTTTGGGCTGTCCTGATATTTCTATGGTCCGCAAAGG	2220
CCCTGGAAGCTCCCTCGTGCGC	TCTCCTGTTCCGACCCTGCCGCTTACCGGATACCTGTC	
4441	AGAGGACAAGGCTGGGACGGCGAATGGCCTATGGACAG	2280
CGCCTTTCTCCCTTCGGGAAGCC	GTGGCGCTTTCTCATACCTCACCCTCTACCTAACCTAA	
GCGGAAAGAGGGAAGCCCTTCGC	CACCGCGAAAGAGTATCGAGTGCGACATCCATAGAGTC	2340
TTCGGTGTAGGTCGTTCGCTCC	AÁGCTGGGCTGTGTGCACGAACCCCCGTTCAGCCCGA	
AAGCCACATCCAGCAAGCGAGGT	TTCGACCCGACACACGTGCTTGGGGGGCAAGTCGGGCT	2400
CCGCTGCGCCTTATCCGGTAACT	PATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATC	
GGCGACGCGGAATAGGCCATTGA	ATAGCAGAACTCAGGTTGGGCCATTCTGTGCTGAATAG	2460
GCCACTGGCAGCAGCCACTGGTA	NCAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTAC	
CGGTGACCGTCGTCGGTGACCAT	TGTCCTAATCGTCTCGCTCCATACATCGCCACGATG	2520
AGAGTTCTTGAAGTGGTGGCCTA	VACTACGGCTACACTAGAAGGACAGTATTTGGTATCTG	
TCTCAAGAACTTCACCACCGGAT	TGATGCCGATGTGATCTTCCTGTCATAAACCATAGAC	2580
CGCTCTGCTGAAGCCAGTTACCT	TCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACA	
GCGAGACGACTTCGGTCAATGGA	AGCCTTTTTCTCAACCATCGAGAACTAGGCCGTTTGT	2640
HgiEII		
AACCACCGCTGGTAGCGGTGGTT	TTTTTGTTTGCAAGCAGCAGATTACGCGCAGAAAAA	
TTGGTGGCGACCATCGCCACCAA	AAAACAAACGTTCGTCGTCTAATGCGCGTCTTTTTT	2700
AGGATCTCAAGAAGATCCTTTGA	TETTTTCTACGGGTCTGACGCTCAGTGGAACGAAAA	
	AGAAAAGATGCCCAGACTGCGAGTCACCTTGCTTTT	2760
CTCACGTTAAGGGATTTTGGTCA	TGAGATTATCAAAAAGGATCTTCACCTAGATCCTTTT	
GAGTGCAATTCCCTAAAACCAGT	ACTCTAATAGTTTTTCCTAGAAGTGGATCTAGGAAAA	2820
AAATTAAAAATGAAGTTTTAAAT		
2821		
TTTAATTTTTACTTCAAAATTTA		2880
TTACCAATGCTTAATCAGTGAGG	• • • • • • • • • • • • • • • • • • • •	2880
TTACCAATGCTTAATCAGTGAGGC	GTTAGATTTCATATATACTCATTTGAACCAGACTGTC	2880
TTACCAATGCTTAATCAGTGAGGG 2881 AATGGTTACGAATTAGTCACTCCC AGTTGCCTGACTCCCCGTCGTGT	GTTAGATTTCATATATACTCATTTGAACCAGACTGTC CACCTATCTCAGCGATCTGTCTATTTCGTTCATCCAT GTGGATAGAGTCGCTAGACAGATAAAGCAAGTAGGTA AGATAACTACGATACGGGAGGGCTTACCATCTGGCCC	2940
TTACCAATGCTTAATCAGTGAGGC 2881 + + + + + + + + + + + + + + + + + +	GTTAGATTTCATATATACTCATTTGAACCAGACTGTC CACCTATCTCAGCGATCTGTCTATTTCGTTCATCCAT GTGGATAGAGTCGCTAGACAGATAAAGCAAGTAGGTA	2940
TTACCAATGCTTAATCAGTGAGGG 2881 AATGGTTACGAATTAGTCACTCCC AGTTGCCTGACTCCCCGTCGTGTI 2941 TCAACGGACTGAGGGGCAGCACAT CAGTGCTGCAATGATACCGCGAGI	GTTAGATTTCATATATACTCATTTGAACCAGACTGTC CACCTATCTCAGCGATCTGTCTATTTCGTTCATCCAT GTGGATAGAGTCGCTAGACAGATAAAGCAAGTAGGTA AGATAACTACGATACGGGAGGGCTTACCATCTGGCCC CCTATTGATGCTATGCCCTCCGGAATGGTAGACCGGG ACCCACGCTCACCGGCTCCAGATTTATCAGCAATAAA	29 4 0 3000
TTACCAATGCTTAATCAGTGAGGC 2881 AATGGTTACGAATTAGTCACTCCC AGTTGCCTGACTCCCCGTCGTGTI 2941 TCAACGGACTGAGGGGCAGCACAT CAGTGCTGCAATGATACCGCGAGJ	GTTAGATTTCATATATACTCATTTGAACCAGACTGTC CACCTATCTCAGCGATCTGTCTATTTCGTTCATCCAT GTGGATAGAGTCGCTAGACAGATAAAGCAAGTAGGTA AGATAACTACGATACGGGAGGGCTTACCATCTGGCCC TCTATTGATGCTATGCCCTCCCGAATGGTAGACCGGG	29 4 0 3000
TTACCAATGCTTAATCAGTGAGGG 2881 AATGGTTACGAATTAGTCACTCCC AGTTGCCTGACTCCCCGTCGTGTJ 2941 TCAACGGACTGAGGGGCAGCACAT CAGTGCTGCAATGATACCGCGAGJ 3001 GTCACGACGTTACTATGGCGCTCTCCCCAGCCAGCCGGAAGGGCCGGAAGGCCCGAGCC	GTTAGATTTCATATATACTCATTTGAACCAGACTGTC CACCTATCTCAGCGATCTGTCTATTTCGTTCATCCAT GTGGATAGAGTCGCTAGACAGATAAAGCAAGTAGGTA AGATAACTACGATACGGGAGGGCTTACCATCTGGCCC CCTATTGATGCTATGCCCTCCGGAATGGTAGACCGGG ACCCACGCTCACCGGCTCCAGATTTATCAGCAATAAA CGGGTGCGAGTGGCCGAGGTCTAAATAGTCGTTATTT GCAGAAGTGGTCCTGCAACTTTATCCGCCTCCATCCA	2940 3000 3060
TTACCAATGCTTAATCAGTGAGGC 2881 AATGGTTACGAATTAGTCACTCCC AGTTGCCTGACTCCCCGTCGTGTT 2941 TCAACGGACTGAGGGGCAGCACAT CAGTGCTGCAATGATACCGCGAGJ 3001 GTCACGACGTTACTATGGCGCTCT CCAGCCAGCCGGAAGGGCCGAGCC 3061	GTTAGATTTCATATATACTCATTTGAACCAGACTGTC CACCTATCTCAGCGATCTGTCTATTTCGTTCATCCAT GTGGATAGAGTCGCTAGACAGATAAAGCAAGTAGGTA AGATAACTACGATACGGGAGGGCTTACCATCTGGCCC PCTATTGATGCTATGCCCTCCCGAATGGTAGACCGGG ACCCACGCTCACCGGCTCCAGATTTATCAGCAATAAA PGGGTGCGAGTGGCGAGTCTAAATAGTCGTTATTT	2940 3000 3060
TTACCAATGCTTAATCAGTGAGGG 2881 AATGGTTACGAATTAGTCACTCCC AGTTGCCTGACTCCCCGTCGTGTI 2941 TCAACGGACTGAGGGGCAGCACAT CAGTGCTGCAATGATACCGCGAGG 3001 CCAGCCAGCCGGAAGGGCCGAGCC CCAGCCAGCCGGAAGGGCCGAGCC GGTCGGTCGGCCTTCCCGGGAAGC	GTTAGATTTCATATATACTCATTTGAACCAGACTGTC CACCTATCTCAGCGATCTGTCTATTTCGTTCATCCAT GTGGATAGAGTCGCTAGACAGATAAAGCAAGTAGGTA AGATAACTACGATACGGGAGGGCTTACCATCTGGCCC ICTATTGATGCTATGCCCTCCCGAATGGTAGACCGGG ACCCACGCTCACCGGCTCCAGATTTATCAGCAATAAA IGGGTGCGAGTGGCCGAGGTCTAAATAGTCGTTATTT GCAGAAGTGGTCCTGCAACTTTATCCGCCTCCATCCA	2940 3000 3060 3120

Figure 29D

CGTTGTTGCCATTGCTGCAGGCATCGTGGTGTCACGCTCGTCGTTTGGTATGGCTTCATT 3181	
GCAACAACGGTAACGACGTCCGTAGCACCACAGTGCGAGCAGCAAACCATACCGAAGTAA	3240
CAGCTCCGGTTCCCAACGATCAAGGCGAGTTACATGATCCCCCATGTTGTGCAAAAAAGC 3241 GTCGAGGCCAAGGGTTGCTAGTTCCGCTCAATGTACTAGGGGGTACAACACGTTTTTTCG	3300
Eael Pvul Gdill	
GGTTAGCTCCTTCGGTCCTCCGATCGTTGTCAGAAGTAAGT	3360
CATGGTTATGGCAGCACTGCATAATTCTCTTACTGTCATGCCATCCGTAAGATGCTTTTC 3361 GTACCAATACCGTCGTGACGTATTAAGAGAATGACAGTACGGTAGGCATTCTACGAAAAG	3420
BcgI I	•
TGTGACTGGTGAGTACTCAACCAAGTCATTCTGAGAATAGTGTATGCGGCGACCGAGTTG 3421 ACACTGACCACTCATGAGTTGGTTCAGTAAGACTCTTATCACATACGCCGCTGGCTCAAC	3480
CTCTTGCCCGGCGTCAACACGGGATAATACCGCGCGCACATAGCAGAACTTTAAAAGTGCT 3481 GAGAACGGGCCGCAGTTGTGCCCTATTATGGCGCGGGTGTATCGTCTTGAAATTTTCACGA	3540
CATCATTGGAAAACGTTCTTCGGGGCGAAAACTCTCAAGGATCTTACCGCTGTTGAGATC 3541 GTAGTAACCTTTTGCAAGAAGCCCCGCTTTTGAGAGTTCCTAGAATGGCGACAACTCTAG	3600
CAGTTCGATGTAACCCACTCGTGCACCCAACTGATCTTCAGCATCTTTTACTTTCACCAG 3601 GTCAAGCTACATTGGGTGAGCACGTGGGTTGACTAGAAGTCGTAGAAAATGAAAGTGGTC	3660
CGTTTCTGGGTGAGCAAAAACAGGAAGGCAAAAATGCCGCAAAAAAGGGGAATAAGGGCGAC 3661 GCAAAGACCCACTCGTTTTTGTCCTTCCGTTTTACGGCGTTTTTTCCCTTATTCCCGCTG	3720
SspI	
ACGGAAATGTTGAATACTCATACTCTTCCTTTTTCAATATTATTGAAGCATTTATCAGGG 3721 TGCCTTTACAACTTATGAGTATGAGAAGGAAAAAGTTATAATAACTTCGTAAATAGTCCC	3780
TTATTGTCTCATGAGCGGATACATATTTGAATGTATTTAGAAAAATAAACAAATAGGGGT 3781 AATAACAGAGTACTCGCCTATGTATAAACTTACATAAATCTTTTTATTTGTTTATCCCCA	3840
TCCGCGCACATTTCCCCGAAAAGTGCCACCTGACGTCTAAGAAACCATTATTATCATGAC 3841 AGGCGCGTGTAAAGGGGGCTTTTCACGGTGGACTGCAGATTCTTTGGTAATAATAGTACTG	3900
ATTAACCTATAAAAATAGGCGTATCACGAGGCCCTTTCGTCTTCAAGAATTCCCTGTGGA 3901 TAATTGGATATTTTTATCCGCATAGTGCTCCGGGAAAGCAGAAGTTCTTAAGGGACACCT	3960
ATGTGTGTCAGTTAGGGTGTGGAAAGTCCCCAGGCTCCCCAGCAGGCAG	4020
GCATGCATCTCAATTAGTCAGCAACCAGGTGTGGAAAGTCCCCAGGCTCCCCAGCAGGCA 4021 CGTACGTAGAGTTAATCAGTCGTTGGTCCACACCTTTCAGGGGTCCGAGGGGTCGTCCGT	4080
GAAGTATGCAAAGCATGCATCTCAATTAGTCAGCAACCATAGTCCCGCCCCTAACTCCGC 4081 CTTCATACGTTTCGTACGTAGAGTTAATCAGTCGTTGGTATCAGGGCGGGGATTGAGGCG	4140
CCATCCCGCCCCTAACTCCGCCCAGTTCCGCCCATTCTCCGCCCCATGGCTGACTAATTT 4141 GGTAGGGCGGGGATTGAGGCGGGTCAAGGCGGGTTAAGAGGCGGGGTACCGACTGATTAAA	4200

Figure 29E

SfiI	
TTTTTATTTATGCAGAGGCCGAGGCCGCCTCGGCCTCTGAGCTATTCCAGAAGTAGTGAG	4260
AAAAATAAATACGTCTCCGGCTCCGGCGGAGCCCGGAGACTCGATAAGGTCTTCATCACTC AVEII	
GAGGCTTTTTTGGAGGCCTAGGCTTTTGCAAAAAGCTGGTCGAGGCTCGCATCTCTCCTT	
4261 CTCCGAAAAAACCTCCGGATCCGAAAACGTTTTTCGACCACCTCCGAGCGTAGAGAGAG	4320
CACGCGCCCGCCCCTACCTGAGGCCGCCATCCACGCCGGTTGAGTCGCGTTCTGCCGC	4380
GTGCGCGGGGGGGATGGACTCCGGCGGTAGGTGCGGCCAACTCAGCGCAAGACGGCG	
CTCCCGCCTGTGGTGCCTCCTGAACTGCGTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGT 4381 GAGGGCGGACACCACGGAGGACTTGACGCAGGCGGCAGATCCATTCAAATTTCGAGTCCA	4440
NgoAIV	
CGAGACCGGGCCTTTGTCCGGCGCTCCCTTGGAGCCTACCTA	4500
GCTCTGGCCCGGAAACAGGCCGCGAGGGAACCTCGGATGGAT	
CGCTTTGCCTGACCCTGCTTGCTCAACTCTACGTCTTTGTTTCGTTTTCTGCGCC 4501 GCGAAACGGACTGGGACGAGGTTGAGATGCAGAAACAAAGCAAAAGACGCGG	4560
HpaI	
GTTACAGATCCGTCGAGGAACTGAAAAACCAGAAAGTTAACTGGTAAGTTTAGTCTTTTT	
CAATGTCTAGGCAGCTCCTTGACTTTTTGGTCTTTCAATTGACCATTCAAATCAGAAAAA	4620
Psp5II BamHI	
GTCTTTTATTTCAGGTCCCGGATCCGGTGGTGGTGCAAATCAAAGAACTGCTCCTCAGTG 4621 CAGAAAATAAAGTCCAGGGCCTAGGCCACCACCACGTTTAGTTTCTTGACGAGGAGTCAC	4680
GATGTTGCCTTTACTTCTAGGCCTGTACGGAAGTGTTACTTCTGCTCTAAAAGCTGCTGC	4740
CTACAACGGAAATGAAGATCCGGACATGCCTTCACAATGAAGACGAGATTTTCGACGACG Hindiii Xbai BaaHii	
AACAAGCTTCTAGACCACCATGAACAAGTTGCTGCTGCTGCGCGCTCGTGTTTCTGGACAT	
TTGTTCGAAGATCTGGTGGTACTTGTTCAACGACACGAC	4800
CTCCATTAAGTGGACCACCCAGGAAACGTTTCCTCCAAAGTACCTTCATTATGACGAAGA	
GAGGTAATTCACCTGGTGGGTCCTTTGCAAAGGAGGTTTCATGGAAGTAATACTGCTTCT SIRWTTQBTPPPKYLHYDBE	4860
KpnI	
AACCTCTCATCAGCTGTTGTGTGACAAATGTCCTCCTGGTACCTACC	
TTGGAGAGTAGTCGACAACACTGTTTACAGGAGGACCATGGATGG	4920
TSHQLLCDKCPPGTYLKQHC-	
TACAGCAAAGTGGAAGACCGTGTGCGCCCCTTGCCCTGACCACTACTACACAGACAG	4980
ATGTCGTTTCACCTTCTGGCACACGCGGGAACGGGACTGGTGATGATGTGTCTGTC	
GCACACCAGTGACGAGTGTCTATACTGCAGCCCCGTGTGCAAGGAGCTGCAGTACGTCAA	5040
CGTGTGGTCACTGCTCACAGATATGACGTCGGGGCACACGTTCCTCGACGTCATGCAGTT H T S D B C L Y C S P V C K B L Q Y V K -	

Figure 29F

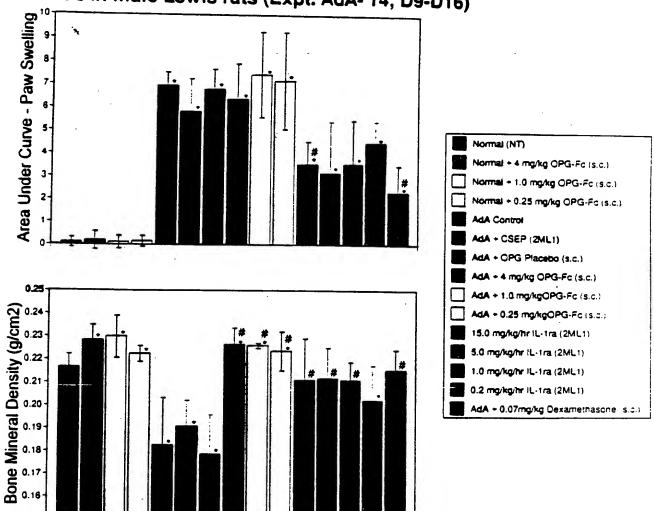
Ŀ	GCAGGAGTGCAATCGCACCCACAACCGCGTGTGCGAATGCAAGGAAGG	5100
b	GATAGAGTTCTGCTTGAAACATAGGAGCTGCCCTCCTGGATTTGGAGTGGTGCAAGCTGG 5101 CTATCTCAAGACGAACTTTGTATCCTCGACGGGAGGACCTAAACCTCACCACGTTCGACC I E F C L K H R S C P F G F G V V Q A G	5160
	BsmBI	
р	AACCCCAGAGCGAAATACAGTTTGCAAAAGATGTCCAGATGGGTTCTTCTCAAATGAGAC 5161 TTGGGGTCTCGCTTTATGTCAAACGTTTTCTACAGGTCTACCCAAGAAGAGTTTACTCTG T P E R N T V C K R C P D G F F S N E T	5220
b	GTCATCTAAAGCACCCTGTAGAAAACACACAAATTGCAGTGTCTTTGGTCTCCTGCTAAC 5221 CAGTAGATTTCGTGGGACATCTTTTGTGTGTTTAACGTCACAGAAACCAGAGGACGATTG S S K A P C R K H T N C S V F G L L L T	5280
	BspEI	
Þ	TCAGAAAGGAAATGCAACACACACACACATATGTTCCGGAAACAGTGAATCAACTCAAAA 5281 AGTCTTTCCTTTACGTTGTGCTGTTGTATACAAGGCCTTTGTCACTTAGTTGAGTTTT Q R G N A T H D N I C S G N S E S T Q R	5340
	Sali BmgI	•
ь	AGTCGACAAAACTCACACATGCCCACCGTGCCCAGCACCTGAACTCCTGGGGGGACCGTC 5341 TCAGCTGTTTTGAGTGTGTACGGGTGGCACGGGTCGTGGACTTGAGGACCCCCCTGGCAG V D K T H T C P P C P A P E L L G G P S	5400
þ	AGTOTTCCTCTTCCCCCCAAAACCCAAGGACACCCTCATGATCTCCCGGACCCCTGAGGT 5401 TCAGAAGGAGGAGGGGGGTTTTGGGTTCCTGTGGGAGTACTAGAGGGCCTGGGGACTCCA V F L F P P K P K D T L M I S R T P E V	5460
ъ	BETI CACATGCGTGGTGGTGGACGTGAGCCACGAAGACCCTGAGGTCAAGTTCAACTGGTACGT 5461 GTGTACGCACCACCACCTGCACTCGGTGCTTCTGGGACTCCAGTTCAAGTTGACCATGCA T C V V V D V S H B D P E V K F N W Y V . Sacii	5520
b	GGACGGCGTGGAGGTGCATAATGCCAAGACAAAGCCGCGGGAGGAGCAGTACAACAGCAC 5521 CCTGCCGCACCTCCACGTATTACGGTTCTGTTTCGGCGCCCCTCCTCGTCATGTTGTCGTG D G V E V H N A K T K P R E E Q Y N S T	5580
ь	GTACCGTGTGGTCAGCGTCCTCACCGTCCTGCACCAGGACTGGCTGAATGGCAAGGAGTA 5581	5640
b	CAAGTGCAAGGTCTCCAACAAGCCCTCCCAGCCCCCATCGAGAAAACCATCTCCAAAGC 5641 GTTCACGTTCCAGAGGTTGTTTCGGGAGGGTCGGGGGTAGCTCTTTTGGTAGAGGTTTCG K C K V S N K A L P A P I E K T I S K A	5700
	SmaI	
b	CAAAGGGCAGCCCCGAGAACCACAGGTGTACACCCTGCCCCCATCCCGGGATGAGCTGAC 5701 GTTTCCCGTCGGGGCTCTTGGTGTCCACATGTGGGACGGGGGTAGGGCCCTACTCGACTG K G Q P R E P Q V Y T L P P S R D E L T	5760
	CAAGAACCAGGTCAGCCTGACCTGCCTGGTCAAAGGCTTCTATCCCAGGGACATCGCCGT 5761	5820

Figure 29G

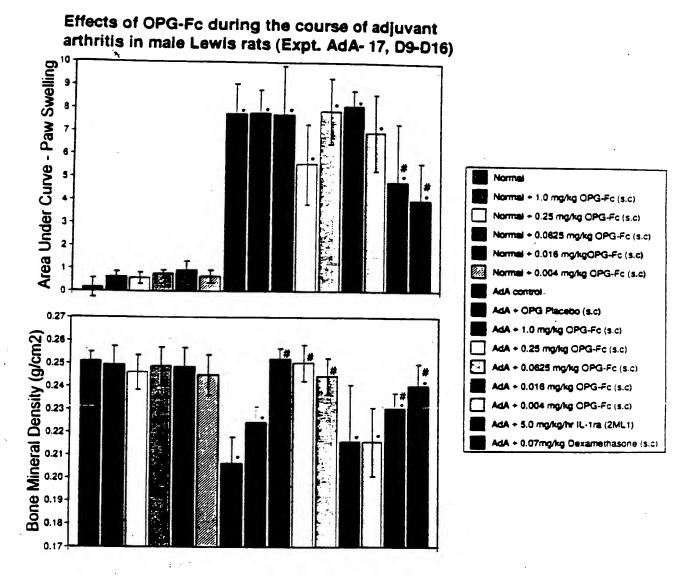
þ	N N Q V S L T C L V K G F Y P S D I A V -
	GGAGTGGGAGAGCAATGGGCAGCCGGAGAACAACTACAAGACCACGCCTCCCGTGCTGGA
b	CCTCACCCTCTCGTTACCCGTCGCCCTCTTGTTCATCTTCTTCCTCCCACCCA
	Aari
ь	CTCCGACGGCTCCTTCTTCCTCTACAGCAAGCTCACCGTGGACAAGAGCAGGTGGCAGCA 5881 GAGGCTGCCGAGGAAGAAGGAGATGTCGTTCGAGTGGCACCTGTTCTCGTCCACCGTCGT 3 D G 3 F F L Y 3 K L T V D K 3 R W Q Q
	SapI
•	GGGGAACGTCTTCTCATGCTCCGTGATGCATGAGGCTCTGCACAACCACTACACGCAGAA 5941
	GAGCCTCTCCCTGTCTCCGGGTAAATGATAACTCGAC
,	CTCGGAAGGGACAGAGGCCCATTTACTATTGAGCTG S L S L S P G K * *

Figure 30A

Effects of OPG-Fc during the course of adjuvant arthritis in male Lewis rats (Expt. AdA- 14, D9-D16)



Paws from rats with adjuvant arthritis induced by 0.5mg mycobacteria in oil were analyzed by DEXA for BMD. Evaluation of BMD, a 29mm X 25mm box was centered at the calcaneus (expt AdA-14 2/99, Amgen nb#22957 p47-49). * compared to normal, # compared to vehicle*
P < 0.05 Mann-Whitney U test

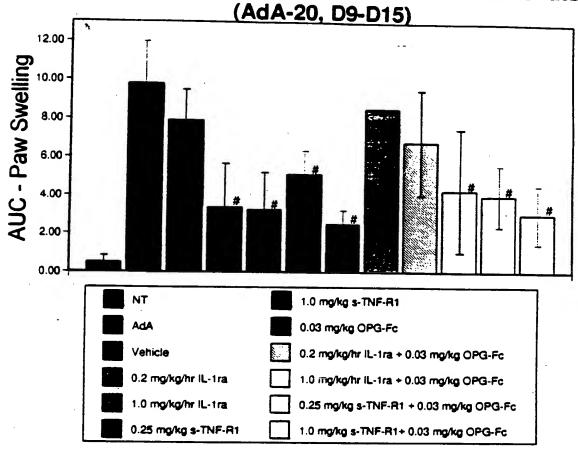


Paws from rats with adjuvant arthritis induced by 0.5mg mycobacteria in oil were analyzed by DEXA for BMD. Evaluation of BMD, a 29mm X 25mm box was centered at the calcaneus (expt AdA -17 3/99, Amgen nb#22957 p62-65). * compared to normal, # compared to vehicle

P < 0.05 Mann-Whitney U test

Figure 31A

Combination treatment with OPG-Fc and IL-1ra or s-TNF-R1 on adjuvant arthritis in male Lewis rats



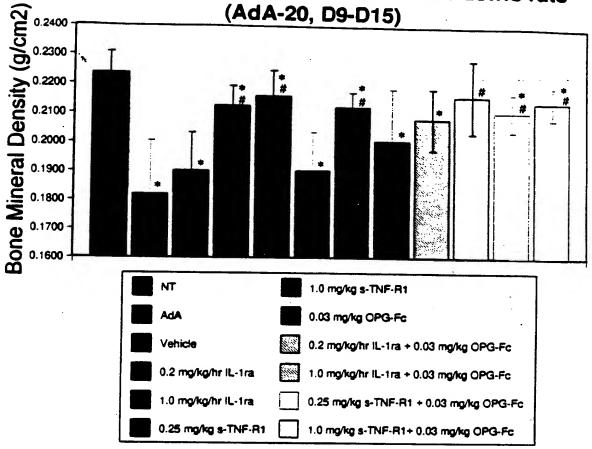
Paws from rats with adjuvant arthritis induced by 0.5mg mycobacteria in oil were analyzed by DEXA for BMD. (expt AdA-20 5/99, Amgen nb#22957 p84).

* compared to normal, # compared to vehicle
P < 0.05 Mann-Whitney U test.

All groups are significant vs normal

Figure 31B

Combination treatment with OPG-Fc and IL-1ra or s-TNF-R1 on adjuvant arthritis in male Lewis rats



Paws from rats with adjuvant arthritis induced by 0.5mg mycobacteria in oil were analyzed by DEXA for BMD. Evaluation of BMD, a 29mm X25mm was centered at the tibiotarsal region. (expt AdA-20 5/99, Amgen nb#22957 p88).

.P < 0.05 Mann-Whitney U test.

compared to normal, # compared to vehicle